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(54) **METHOD OF MANUFACTURING AN ENCLOSED TRANSCEIVER**

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(58) Field of Search **235/487, 492, 235/380, 382**

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(57)

ABSTRACT

The present invention teaches a method of manufacturing an enclosed transceiver, such as a radio frequency identification ("RFID") tag. Structurally, in one embodiment, the tag comprises an integrated circuit (IC) chip, and an RF antenna mounted on a thin film substrate powered by a thin film battery. A variety of antenna geometries are compatible with the above tag construction. These include monopole antennas, dipole antennas, dual dipole antennas, a combination of dipole and loop antennas. Further, in another embodiment, the antennas are positioned either within the plane of the thin film battery or superjacent to the thin film battery.

24 Claims, 12 Drawing Sheets

